ABSTRACT

The present invention is directed to facilitating communication within an automation system having a plurality of networks and network protocols. Specifically, a Modbus network is operably connected to a network. A fieldbus coupler operably connected to both networks having a program facilitates communication within the automation system wherein devices connected to the network can be accessed for monitoring and/or controlling via Modbus commands. The fieldbus coupler (FBC) program accepts a Modbus function code containing one or more embedded message of varying types. The FBC program using additional information contained in the Modbus function code and the message type reads or writes only the required information to and from the field devices. This specific read or write request of the information and the embedding of more than one message type reduces overhead and bandwidth usage, thus improving bus response time and efficiency.

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